

ABSTRACT

The present invention provides for reinforced and drug eluting stent-grafts and related methods of implanting and manufacturing the stent-grafts. A stent-graft of the present invention may include a tubular stent, a biocompatible covering surrounding the stent, and a supporting collar coupled to the proximal end of the stent-graft. A drug agent
5 may be applied to a textured external surface layer of the biocompatible covering, or alternatively to a space between the textured external surface layer and a smooth luminal surface layer of the biocompatible covering, and allowed to elute over time into a wall of a body lumen after the stent-graft is deployed. The collar of the stent-graft absorbs pressure
10 exerted on the stent-graft by fluid flow within the body lumen in order to minimize potential damage to the stent-graft, and may also include barbs to further secure the stent-graft to the body lumen.